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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,660	11/24/2003	Steven D. Jones	1904-0005	6216
26085 7590 05/31/2007 THE JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS LABORATORY OFFICE OF PATENT COUNSEL 11100 JOHNS HOPKINS ROAD MAIL STOP 7-156 LAUREL, MD 20723-6099			EXAMINER TRAN, KHAI	
			ART UNIT 2611	PAPER NUMBER
			MAIL DATE 05/31/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

3/11

Office Action Summary	Application No. 10/720,660	Applicant(s) JONES ET AL.	
	Examiner KHAI TRAN	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5, 11 and 12 is/are allowed.
- 6) ☒ Claim(s) 6-8 is/are rejected.
- 7) ☒ Claim(s) 9 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/24/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 6-7, 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Bamburak et al (U.S. Pat. 6,430,396).

Regarding claim 6, Bamburak et al disclose a signal observation system (SOS) for controlling a plurality of receiver channels simultaneously, the SOS comprising: a plurality of digitizers individually coupled with a plurality of tunable receivers forming a plurality of receiver channels such that each receiver channel can be tuned to a variety of frequencies so as to observe and digitize signals into digitized data (col. 4, lines 43-53, a mobile communication device locates a service provider and registers with the service provider. Recalling FIG. 1, service providers are located at a plurality of frequency bands across the radio spectrum. In order to find a service provider, the communication device searches the spectrum to find service providers. The communications device examines received service provider code e.g., SOC (Service Operator Code) or SIDs (System Identification Code) to determine whether the service provider is an optimal, preferred or prohibited service provider); storage means to

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receive and store digitized data observed by said receiver channels; triggering means to control the tuning of the receivers and the timing of the digitizers (col. 4, lines 18-42, showing Information such as user preferences, user telephone numbers, preferred service provider lists and frequency search schedules are stored in memory 16.

Memory 16 may include storage devices such as random access memory (RAM), read only memory (ROM) and/or programmable read only memory (PROM). A user communicates with control system 14 via keypad 18. Control system 14 communicates information to the user via display 20. Display 20 may be used to display information such as status information and items such as telephone numbers entered via keypad 18. Sound information to be transmitted from the mobile communication device 10 is received via microphone 22, and sound communications received by mobile communication device 10 are played to the user via speaker 24); a processor coupled via a digital backplane with the digitizers, receivers, storage means, and triggering means to control the actions of the digitizers, receivers, storage means, and triggering means based on a user supplied frequency schedule (col. 4, line 54 to col. 5, line 40).

Regarding claim 7, Bamburak et al disclose wherein the frequency schedule defines an observation run, the frequency schedule being comprised of a set of lists, each list corresponding to a separate receiver channel, the lists comprised of a plurality of frequencies that define the frequencies each receiver channel is to observe during execution of the observation run and how long to observe each frequency before re-tuning to the next frequency in the list (col. 4, lines 18-53).

Claim 8 is similar to claim 1. Therefore, claim 8 is rejected under a similar rationale.

Allowable Subject Matter

3. Claims 1-5, and 11-12 are allowed.
4. Claims 9-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
5. The following is a statement of reasons for the indication of allowable subject matter: none of the prior art of the record discloses or suggests that a signal observation system (SOS) for controlling a plurality of receiver channels simultaneously, the receiver channels comprised of tunable receivers and digitizers in a hardware configuration, wherein the tunable receivers and digitizers possess inherent properties that define their respective capabilities, the SOS comprising: a processor readable storage medium; code recorded in the processor readable storage medium to process a frequency schedule that defines an observation run, the frequency schedule being comprised of a set of lists, each list corresponding to a separate receiver channel, the lists comprised of a plurality of frequencies that define the frequencies each receiver channel is to observe during execution of the observation run and how long to observe each frequency before re-tuning to the next frequency in the list; code recorded in the processor readable storage medium to generate a local synchronization signal that defines a triggering hierarchy that each receiver channel will reference during the observation run; and code recorded in the processor readable storage medium to generate a start signal that

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is broadcast to the receiver channels that initiates an observation run that binds each receiver channel to the frequency schedule.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rose (U.S. Pat. 6,313,794) discloses a method of detection and determining an angular location of frequency agile emitters.

Stetzler et al (US 2002/0055343 A1) disclose a digital radio receiver.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAI TRAN whose telephone number is (571) 272-3019. The examiner can normally be reached on 7:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JAY PATEL can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



KHAI TRAN
Primary Examiner
Art Unit 2611

KT
May 24, 2007